

CLAIMS:

1. A computer resource allocating method for allocating a different computer to each of a plurality of users connected to a computer system via a network, the computer system including a plurality of interconnected computers for processing an input packet from each user, and the method comprising the steps of:

inputting from each user a service level condition contracted with the computer system;

assigning each service level condition with an identifier for identifying the service level condition;

classifying the plurality of computers into groups each corresponding to each identifier in accordance with the service level condition, and forming an allocation definition table storing information on a correspondence between each identifier and at least one computer assigned to the identifier;

inputting information necessary for identifying a user related to each input packet from the input packet;

forming a user identification table storing information on a correspondence between each identifier and each information; and

by referring to the user identification table, acquiring the identifier from a received input packet, and by referring to the allocation definition table, transferring the received input packet to the

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2. A computer resource allocating method according to claim 1, wherein the computer system further comprises a load allocating apparatus for distributing loads of the plurality of computers, and the allocation definition table is set to the load allocating apparatus.

an allocation definition table storing information on a correspondence between an identifier and at least one computer, the identifier being assigned to each service level condition contracted between the computer system and each user, and identifying each service level condition, at least one computer being assigned to each identifier and the plurality of computers being classified into groups each corresponding to each identifier in accordance with the service level condition; and

means for receiving an input packet added with the identifier, deriving the identifier from the received input packet, and by referring to said allocation definition table, transferring the received input packet to the computer assigned to the derived

4. A computer resource allocating method according to claim 1, wherein the input packet is a request packet from a user, and the information in the user identification table necessary for identifying the user related to the request packet is a transmission source IP address of the request packet.

5. A computer resource allocating method according to claim 1, wherein the input packet is a request packet from a user, and the information in the user identification table necessary for identifying the user related to the request packet is a transmission source IP address of the request packet.

6. A method of allocating computer resources to each of a plurality of users connected to a computer system via an external network, the computer system including a plurality of computers interconnected via an internal network for processing an input packet from each user, and the method comprising the steps of:

for a use contract between each user and the computer system, setting from each user a virtual IP address to be used as an access destination address of a process request packet, as an address to be used for accessing the user system in the computer system, determining from the process request packet which of an access source IP address and an access destination IP address in the process request packet is used as information necessary for identifying a user related to

urging each user to input a service level condition as a portion of the use contract, the service level condition including at least upper and lower limits of the number of computers allocated to process the process request packet supplied from each user; and

7. A method of allocating computer resources to each of a plurality of users connected to a computer system via an external network, the computer system including a plurality of computers interconnected via an internal network for processing an input packet from each user, and the method comprising the steps of:

for a use contract between each user and the computer system, setting from each user a virtual IP address to be used as an access destination address of a process request packet, as an address to be used for accessing the user system in the computer system, determining from the process request packet which of an access source IP address and an access destination IP address in the process request packet is used as information necessary for identifying a user related to the process request packet, and urging each user to

input the virtual address;

urging each user to input a service level condition as a portion of the use contract, the service level condition including at least a use rate of computers allocated to process the process request packet supplied from each user; and

allocating a computer for processing the process request packet supplied from each user in accordance with the input service level condition, and recording a history of the use rate of allocated computers.

8. A computer system for processing an input packet from each of a plurality of users, comprising:

a plurality of computers interconnected via a network, each computer being assigned a process;

managing means for receiving, from each of the plurality of users, a condition of deriving information necessary for identifying a user related to a packet, from the packet, and a service level condition related to processing the packet, forming a user identification table storing information on a correspondence between an identifier for identifying the service level condition and each information, determining a computer group assigned to each user in accordance with the service level condition, and forming an allocation definition table storing information on a correspondence between each information and each computer group;

a load allocating apparatus for deriving the identifier from the input packet added with the identifier, identifying a computer group for processing the input packet in accordance with the derived identifier and with reference to the allocation definition table, and transferring the input packet to the identified computer group.

inputting from each user a service level
condition contracted with the computer system;

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        assigning each service level condition with
an identifier for identifying the service level
condition;

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classifying a plurality of OSEs of the computer into groups each corresponding to the

identifier, in accordance with the service level condition, and forming a time divisional execution rate table storing information on a correspondence between the identifier and a time divisional execution rate of at least one computer corresponding the OS assigned to the identifier;

inputting information necessary for identifying a user related to each input packet from the input packet;

forming a user identification table storing information on a correspondence between each identifier and each information; and

by referring to the user identification table, acquiring the identifier from a received input packet, and by referring to the time divisional execution rate table, transferring the received input packet to the OS assigned to the acquired identifier.

10. A computer system having a plurality of users connected via a network and having one or more computers for processing an input packet from each of the plurality of users, wherein:

the computer performs a time divisional operation of a plurality of operating systems each utilizing a dedicated resource, and the computer system is capable of defining an execution rate of the time divisional operation;

a service level condition contracted with the computer system is input from each user;

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further comprises a plurality of load allocating means, and the method further comprises the steps of setting the changed computer allocation table of each user to the load allocating means, and of standing by until the setting at all of the plurality of load allocating means is completed.

14. A computer resource allocating method according to claim 12, wherein the plurality of computers include a plurality of computer groups having different functions, the computer allocation allocates computers belonging to the same computer group, and when the computer resources of some computer group are to be increased, computers are selected from the same computer group.

15. A computer resource allocating method for a computer system having a plurality of computers interconnected via a network each being set with a standard access root file, the computer system processing a request from each of a plurality of users, the method automatically changing a computer allocation to each user, and the method comprising the steps of:

receiving an operation state of the computer resources;

comparing the operation state with a service level of each user;

judging from the comparison whether a computer allocation to each user is changed;

changing a computer allocation table of each

user; and

instructing to change the root file name of each computer.

16. A computer system having a plurality of computers and computer resource allocating means interconnected via a network and processing a request packet from each of a plurality of users, said computer resource allocating means comprising:

means for receiving an operation state of the computer resources;

means for comparing the operation state with a service level of each user and judging from the comparison whether a computer allocation to each user is changed; and

means for changing a computer allocation table of each user if the computer allocation table is to be changed.

17. A computer system according to claim 16, wherein said computer resource allocating means further comprises:

means for monitoring the operation state of the computer resources; and

means for changing charge information in accordance with a change in the computer allocation.

18. A computer resource allocating method for a computer system having one or more computers interconnected via a network and processing a request packet from each of a plurality of users, each computer

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performing a time divisional operation of a plurality of operating systems each utilizing a dedicated resource, the computer system being capable of defining an execution rate of the time divisional operation, and the method for automatically changing a computer allocation to each user, comprising the steps of:

monitoring an operation state of the computer resources;

comparing the operation state with a service level of each user;

judging from the comparison whether a rate of the time divisional operation for each user is changed;

changing a time divisional operation rate table of each user; and

changing charge information in accordance with a change in the time divisional operation rate.

19. A computer resource allocating method for a computer system having one or more computers interconnected via a network and processing a request packet from each of a plurality of users, each computer performing a time divisional operation of a plurality of operating systems each utilizing a dedicated resource, the computer system being capable of defining an execution rate of the time divisional operation, and the method for automatically changing a computer allocation to each user, comprising the steps of:

receiving an operation state of the computer resources;

comparing the operation state with a service level of each user;

judging from the comparison whether a rate of the time divisional operation for each user is changed; and

changing a time divisional operation rate table of each user.

20. A computer system having one or more computers and computer resource allocating means interconnected via a network and processing a request packet from each of a plurality of users, each computer performing a time divisional operation of a plurality of operating systems each utilizing a dedicated resource, the computer system being capable of defining an execution rate of the time divisional operation, and said computer resource allocating means comprising:

means for receiving an operation state of the computer resources;

means for comparing the operation state with a service level of each user and judging from the comparison whether a computer allocation to each user is changed; and

means for changing a computer allocation table of each user if the computer allocation table is to be changed.

21. A computer system according to claim 20, wherein said computer resource allocating means further comprises:

means for changing charge information in accordance with a change in the computer allocation.

comparing a service level preset to each user
with an operation state of computer resources;

recording the numbers of allocated computers
and allocated times for each user identifier; and

calculating a charge in accordance with products of the numbers of allocated computers and allocated times.

23. A charging method for a computer system having a plurality of computers classified into computer groups each having a different function and a plurality of computer resources allocating means, respectively interconnected by a network, the computer system processing a request packet from each of a plurality of users, and the method for charging each user, comprising the steps of:

comparing a service level preset to each user
with an operation state of computer resources and
changing if necessary a computer allocation to each

recording the numbers of allocated computers and allocated times for each computer group and for each user identifier; and

24. A charging method for a computer system having a plurality of computers classified into computer groups each having a different performance and a plurality of computer resources allocating means, respectively interconnected by a network, the computer system processing a request packet from each of a plurality of users, and the method for charging each user, comprising the steps of:

recording the numbers of allocated computers and allocated times for each computer group and for each user identifier; and

25. A charging method for a computer system having a plurality of computers and computer resources allocating means interconnected by a network, the

comparing a service level preset to each user with an operation state of computer resources and changing if necessary a time division allocation rate

calculating a charge from a product of the allocation time rate and allocated time.

comparing a service level preset to each user with an operation state of computer resources and changing if necessary a computer allocation and a time division allocation rate of the time division operation of each user in accordance with the comparison;

recording the numbers of allocated computers and allocated times, time division allocation rates and allocated times for each computer group and for each user identifier; and

calculating a charge in accordance with products of the numbers of allocated computers,

allocation rates and allocated times for each computer group.

28. A charging method for a computer system having a plurality of computers classified into computer groups each having a different performance and a plurality of computer resources allocating means, respectively interconnected by a network, the computer system processing a request packet from each of a plurality of users, and the method for charging each user, comprising the steps of:

comparing a service level preset to each user with an operation state of computer resources and changing if necessary a computer allocation and a time division allocation rate of the time division operation to each user in accordance with the comparison;

recording the numbers of allocated computers and allocated times, time division allocation rates and allocated times for each computer group and for each user identifier; and

calculating a charge in accordance with products of the numbers of allocated computers, allocation rates and allocated times for each computer group.

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